Invasion by exotic plant species often is facilitated along networks of primary and secondary roads, railroads, and power lines. Disturbance associated with creating and maintaining these linear features also enhances the establishment of exotic species. To evaluate these "bottom-up" effects, we modeled the risk of exotic plant species invasion along linear corridors (Fig. 2).

We also model anthropogenic factors that interrupt connectivity and increase fragmentation of wildlands, such as roads, railroads and agricultural lands (Fig.3).

Far left — Amercian crows
Left — common raven

Figure 1
Anthropogenic factors that influence predator numbers and habitat use. To model predators habitat use, we will employ mathematical functions that reflect daily movement patterns of American crows and common ravens.

Figure 2
Anthropogenic factors that act as dispersal agents for exotic plants. The final model will depict exotic plant invasion risk across landscapes in the western United States.

Above – exotic plants trailing along a road.
Left – rush skeletonweed, *Chondrilla juncea*

Figure 3
Anthropogenic factors that influence wildland connectivity and vertebrate dispersal. Our final model will be based on mathematical functions that incorporate inter-patch distance, patch size, and density.